

Machine Id
ST276
Component
Diesel Engine
Fluid
PETRO CANADA DURON UHP 5W40 (41 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0078015	PC0056496	PC0061302
Sample Date		Client Info		14 Oct 2023	01 Dec 2022	22 Mar 2022
Machine Age	hrs	Client Info		5341	4817	0
Oil Age	hrs	Client Info		250	0	0
Filter Age	hrs	Client Info		250	0	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	13	10	10
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	2	1	1
Lead	ppm	ASTM D5185(m)	>40	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>330	3	9	2
Tin	ppm	ASTM D5185(m)	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

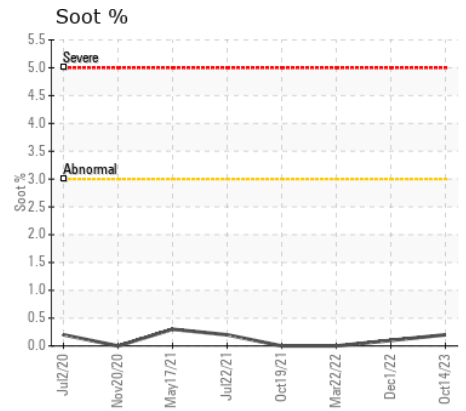
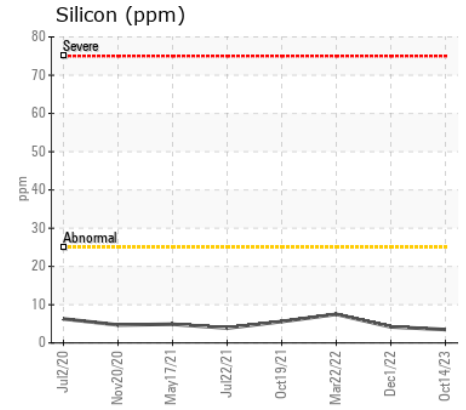
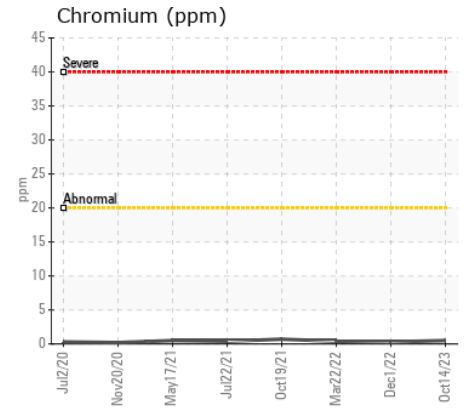
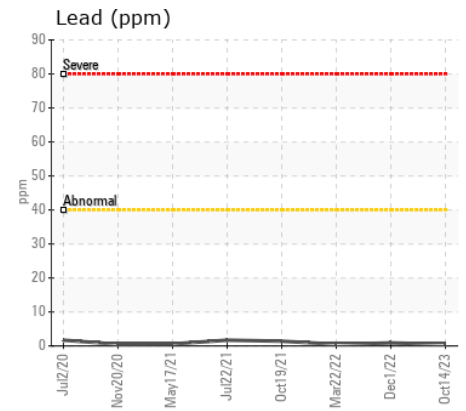
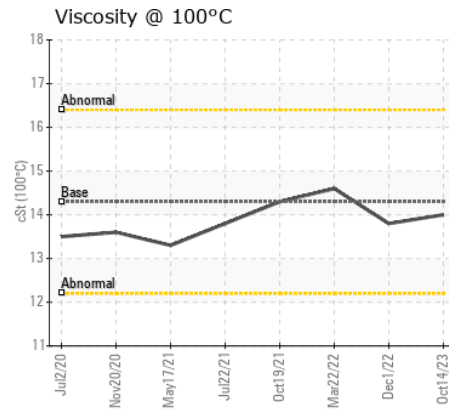
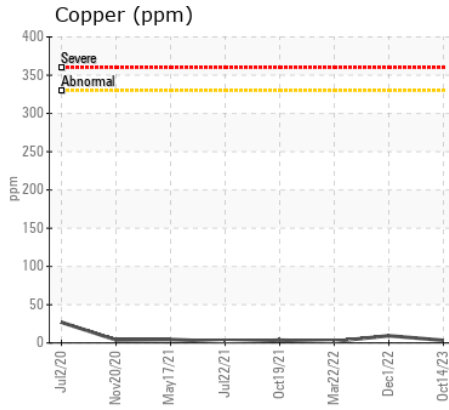
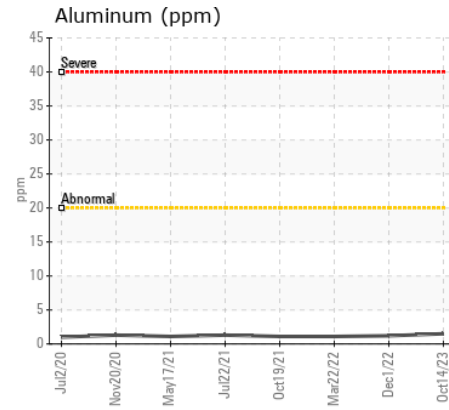
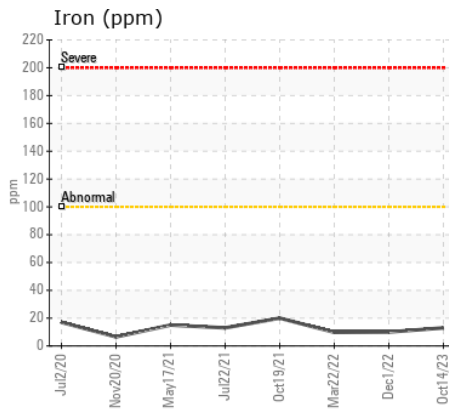
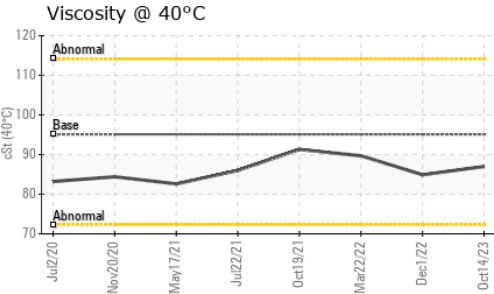
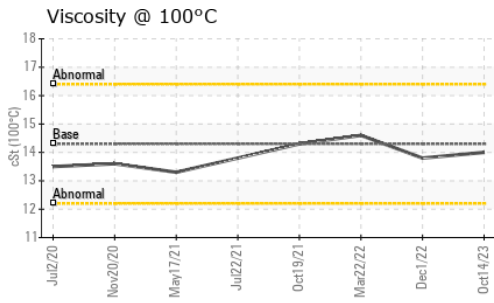
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	4	8
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.2	0.1	0
Nitration	Abs/cm	ASTM D7624*	>20	9.7	9.2	9.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.1	21.8	22.3
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		4	4	4
Boron	ppm	ASTM D5185(m)	65	33	40	44
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	65	59	55	55
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	1160	1068	1053	1114
Calcium	ppm	ASTM D5185(m)	820	775	836	808
Phosphorus	ppm	ASTM D5185(m)	1160	944	1043	1007
Zinc	ppm	ASTM D5185(m)	1260	1137	1158	1175
Sulfur	ppm	ASTM D5185(m)	3000	2715	2712	2641
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.7	18.6	18.7
Visc @ 40°C	cSt	ASTM D7279(m)	95.1	87.0	84.9	89.7
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	14.0	13.8	14.6
Viscosity Index (VI)	Scale	ASTM D2270*	169	165	166	170



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Green Infrastructure and Partners Inc (GIPI) - 286 - Shoring & Foundations
Sample No. : PC0078015 **Received** : 10 Jan 2024
Lab Number : 02607731 **Diagnosed** : 11 Jan 2024
Unique Number : 5708817 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: KV40, VI)
 To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

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